

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

1. (Currently Amended) An intervertebral implant having a central axis (1)-substantially parallel to or coaxial with an axis of a spinal column, comprising:

(A) an upper and a lower terminal part (2;3) each fitted with an outermost surface (5;6) configured transversely to the central axis (1), said upper terminal part having a first curved concave inner surface (7) and said lower terminal part having a second curved concave inner surface (8), said first and second curved concave surfaces being opposite one another; and

(B) a joint element (4) configured between the terminal parts (2;3) and resting in a sliding manner against the curved concave inner surfaces (7;8) of the upper and lower two terminal parts (2;3),

(C) ~~the first concave inner surface (7) is a partial surface of a first external surface which is rotationally symmetrical about a first axis of rotation (12) transverse to the central axis (1), and~~

(D) ~~the second concave inner surface (8) is a partial surface of a second rotationally symmetrical conical external surface (16) having a second axis of rotation (14) perpendicular to the central axis (1)~~
the joint element including first and second external convex slide surfaces, the first slide surface contacting the first curved inner surface of the upper terminal part, the second slide surface contacting the second curved inner surface of the lower terminal part, the first concave inner surface and the first slide surface forming a first joint rotatable about a first axis of rotation, the first axis of rotation being perpendicular to the central axis when in an initial position, the second curved inner surface and the second slide surface forming a second joint rotatable about a second axis of rotation, the second axis of

rotation intersecting the central axis at an acute angle α , the second axis of rotation being spaced apart from the first axis of rotation by a distance A as measured along the central axis.

2. (Currently Amended) The intervertebral implant as claimed in claim 1, wherein the first axis of rotation (12) and the second axis of rotation (14) cross each other.

3. (Canceled)

4. (Currently Amended) The intervertebral implant as claimed in claim 1[[3]], wherein ~~the radii of curvature of the first curved concave inner surface (7) has a first radius of curvature and of the first external convex slide surface (9) resting against the convex joint element (4) has a second radius of curvature, the first radius of curvature being different than the second radius of curvature are different and in that the slide surface (7) is spherical, ellipsoidal or barrel-like whereby a point-like rest is made possible between the external convex slide surface of the joint element (4) and the first curved concave inner surface (7) contact one another via line contact.~~

5. (Currently Amended) The intervertebral implant as claimed in claim 1[[3]], wherein ~~the radii of curvature of at least one of the slide surfaces (9; 10) at the convex joint element (4) has a first radius of curvature and of at least one of the curved concave inner surfaces (7; 8) of the terminal parts (2; 3) has a second radius of curvature, the first radius of curvature being different than the second radius of curvature are different whereby linear rest may be implemented between the convex joint element (4) and at least one of the curved concave inner surfaces (7; 8) contact one another via line contact.~~

6. (Currently Amended) The intervertebral implant as claimed in claim 1[[3]], wherein the first slide surface (9) of the joint element (4) is complementary to the first curved concave inner surface (7)

~~wherein the first concave inner surface (7), together with the first slide surface (9), constitute the slide surfaces of a first joint rotatable about the first axis of rotation (12).~~

7. (Currently Amended) The intervertebral implant as claimed in claim 1[[3]], wherein the second slide surface (10) of the joint element (4) is complementary to the second curved concave inner surface (8) ~~wherein the second concave inner surface (8), together with the second slide surface (10), constitute the slide surfaces of a second joint rotatable about the second axis of rotation (14).~~

8. (Currently Amended) The intervertebral implant as claimed in claim 1, wherein the ~~second axis of rotation (14) intersects the central axis (1) at an angle α is~~ between 60 and 88 degrees.

9-11. (Canceled)

12. (Currently Amended) The intervertebral implant as claimed in claim 1[[11]], wherein $0 < \text{distance } A < 18 \text{ mm}$ ~~the distance A is between 0 and 18 mm.~~

13. (Currently Amended) The intervertebral implant as claimed in claim 1, wherein the outermost surfaces (5,6) exhibit a three-dimensional structure.

14. (Currently Amended) The intervertebral implant as claimed in claim 1, wherein the outermost surfaces (5,6) are titanium grids that can be connected to the terminal parts ~~(2,3).~~

15. (Currently Amended) The intervertebral implant as claimed in claim 1, wherein:

~~(a) the conical external surface (16) comprises a cone tip (18) situated on the second axis of rotation (14);~~

~~(b) the intervertebral implant comprises a front side (19) pointing at the cone tip (18) and opposite a rear side (20);~~

~~(c) at least one of the terminal parts (2;3) comprises a first rotation-restricting stop (21) shortening a the front side (19) of the intervertebral implant parallel to the central axis (1) about the first axis of rotation (12) at an angle of rotation γ between 5 and 15 degrees; and~~

~~(d) at least one of the terminal parts (2;3) includes a second rotation-restricting stop (22) shortening a the rear side (20) of the intervertebral implant parallel to the central axis (1) about the first axis of rotation at an angle of rotation β between 2 and 15 degrees.~~

16. (Currently Amended) The intervertebral implant as claimed in claim 15, further comprising a third rotation-restricting stop (23) restricting the rotation about the second axis of rotation (14) at a maximum angle of rotation δ between $[[+]]$ -5 degrees and $.+[[-]]$ 10 degrees.

17. (Currently Amended) The intervertebral implant as claimed in claim 1, wherein at least one of the terminal parts (2;3) is a three-element part and comprises an outermost cover plate (24), a joint pan (26) enclosing the curved concave inner surface (7;8) and in-between an elastically deforming spacer (25).